

ABSTRACT OF THE DISCLOSURE

A surface acoustic wave actuator has a mover arranged on a first surface of a piezoelectric board and comb-shaped electrodes formed on the first surface. High frequencies are applied to the comb-shaped electrodes to generate Rayleigh waves that move the mover. In the surface acoustic wave actuator, the com-shaped electrodes include first to fourth electrodes formed on the first surface of the piezoelectric board, the first and third comb-shaped electrodes being on each side of the mover on an X-axis, the second and fourth comb-shaped electrodes being on each side of the mover on a Y-axis. The mover at least has a permanent magnet. The surface acoustic wave actuator further has a unit to selectively apply a high frequency to at least one of two electrodes one selected from the first and third comb-shaped electrodes and the other from the second and fourth comb-shaped electrodes. The surface acoustic wave actuator also has a mover holder facing the mover with the piezoelectric board interposed therebetween. The mover holder at least has a magnetic material configured to hold the mover.